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Factors Related to the Status of Tetanus Toxoid (TT) Immunization among Schoolgirls Advanced Level in Muna, Indonesia

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Abstract

Currently we are still experiencing a serious public health problem. This situation can be seen from the high maternal mortality rate (MMR) in Indonesia, namely 359 /100.000 (CBS, 2012), high infant mortality rate (IMR) ie 32/1000 (CBS, 2012). This study aims to determine the proportion of high school girls who are immunized TT, knowing the relationship predisposing factors (knowledge, attitudes, beliefs, residence status, father's education, mother's education and student), enabling factors (the number of sources of information and the intensity information obtained by student). The study design was cross-sectional; the entire population is high school students in the 18 districts in Muna are classified as high risk TT. The sample was selected with the criteria of student status and be selected as a sample. Respondents consisted of 730 students. Results show General characteristics of respondents based on factors predisposing, enabling, needs, and driving forces. Characteristics predisposing factors show more than half of the 513 respondents (70.3%) had knowledge of the take good TT immunization, generally has a positive 444 (60.85%) and positive confidence 392 (53.7%), most of whom live at home alone 374 (51 , 2%), general education their parents completed high school, 207 mothers (28.4%) and 237 fathers (32.5%). Sources of information obtained regarding TT immunization respondents generally quite 709 (97.1%), as well as most of the information intensity sufficient 408 (55.9%).

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Factors needs, In general, respondents expressed no need TT which 436 (59.7%). Factors driving, Most respondents expressed no influence of peers on the TT immunization status of 426 (58.4%) and generally girls declare no role of teachers towards their immunization status of the 420 (57.5%).

Keywords: Tetanus toxoid; Immunization; public health problem

1. Introduction

Currently we are still experiencing a serious public health problem. This situation can be seen from the high maternal mortality rate (MMR) in Indonesia, namely 359 /100.000 [1], high infant mortality rate (IMR) ie 32/1000 [1] when compared with other ASEAN countries, also a high proportion of births not health facility reached 29.6%. [2], and there are variations in the level of the infant and maternal mortality in some areas in Indonesia [3]. On maternal and neonatal tetanus is the most common cause of death due to childbirth and handling clean cord. Tetanus not marked with a stiff muscle pain caused by a neurotoxin produced by Clostridium tetani in anaerobic wound (closed). Neonatal tetanus (TN) is tetanus in infants aged 3 and 28 days after birth and maternal tetanus (TM) is tetanus in pregnancy and in 6 weeks after delivery. When tetanus occurs mortality is very high, especially when proper medical care is not available. This becomes even worse if aid deliveries do not health facilities and personnel are not trained [4].

Neonatal tetanus is one of the causes of infections caused by Clostridium tetani spores contamination of wounds newborn when cutting the umbilical cord or when the umbilical cord care [5]. Some risk factors for the occurrence of neonatal tetanus, among others: immunity in infants, deliveries are not eligible 3 clean (clean hands helper, clean cutlery cord and clean place of birth), and cord care that does not meet the health requirements [5]. Immunity baby is one risk factor for the occurrence of neonatal tetanus immunization status is closely connected with his mother during pregnancy. Pregnant women with tetanus toxoid immunization status (TT) complete the five-times TT (TT-5) or TT immunization status of at least two times (TT-2) at appropriate intervals, then the baby is born and the mother will be protected from tetanus Neonatal. Deliveries are ineligible three helpers clean the clean hands, clean cutlery cord and clean place of birth, and cord care that does not meet the health requirement which is also a risk factor for neonatal tetanus, still the focus of attention because of the high number of births done at home which is 59% for Indonesia and in Southeast Sulawesi is still 93%. Besides, deliveries are performed by other than health workers or traditionally by herbalists in Southeast Sulawesi is still quite high at 54.5% [6]. Immunity to tetanus can only be obtained through artificial immunity, passively with anti-tetanus serum injection and actively with the administration of tetanus toxoid (TT).

Based on the evaluation of the WHO and UNICEF in 1999, the elimination of neonatal tetanus in the world who are targeted in 2000 was not achieved because it has not found an effective operational strategies. Therefore, UNICEF, WHO and UNFA again invite developing countries in the world, including Indonesia, to achieve the targets for Maternal and Neonatal Tetanus Elimination (MNTE) in 2005 to raise funds for Maternal and Neonatal Tetanus (MNT) world [4].

In 2003, Indonesia has successfully achieved Universal Child Immunization (UCI) more than 80% for the full

TT (TT-5 doses) for elementary school children through BIAS, but for a group of women of childbearing age (WUS) has not been reached. Without the efforts of acceleration, estimated Indonesia had to wait until 2027 to be able to stop the immunization of pregnant women and brides (MOH, 2003). To speed up efforts to accelerate the elimination of neonatal tetanus in mothers and infants in Indonesia, the Ministry of Health made a new strategy which is divided into three stages: (i) short-term goals to secure WUS villages / districts that have high risk and are to be increased to lower the risk TT immunization WUS way until all WUS in the village of at least has the status of TT-3, (ii) the medium term, the efforts to stop TT WUS, the bride and groom (catin) and pregnant women (pregnant women) and TT WUS seeks to achieve TT- 5 for the entire WUS, and (iii) Long-term, namely an attempt to maintain the status of elimination to provide immunity against tetanus to the status of the TT-5 elementary school children through school programs Childhood Immunization Month (BIAS) [3].

Women of childbearing age (WUS) that women aged 15-49 years, is the main target of short-term and medium-term to accelerate the elimination of neonatal tetanus. With complete immunization status (TT5) on WUS, it is not necessary anymore immunization in pregnant women and acceleration TT WUS in a district / city can be stopped. Thus it can be done cost-efficiency large enough vaccine procurement [2]. Based on WUS categories above, then the student senior high school level (high school) by age is also a group of WUS. Therefore, high school student is one of the target acceleration tetanus elimination, including pregnant women, infants, the bride and female workers in areas of high risk category neonatal tetanus (TN). Thus immunization of female students in high school is one of the strategies that are considered quite effective in immunization on WUS groups. Muna is one of the districts in Southeast Sulawesi province were classified as high risk areas TN, given that the elimination TN achieved when in a district / city has a number of cases of TN <1 per 1,000 live births. Operationally, this status can be measured by the level of immunization and attendance at delivery by skilled health personnel. Currently there are 59 districts / cities in 18 provinces that have not yet reached the target MNTE or so-called high-risk [2].

Student high school level as described above, is one of the target acceleration elimination TN. Implementation of the TT immunization done in school is more effective because the proportion of high school girls, especially in Muna contributed 42% (4,327 people) of the total existing WUS (10.428 people), which is expected to accelerate the status of a region is not at risk TN. Implementation of the TT WUS on high school girls in Indonesia held three rounds. An operational units (schools and workplaces) can be considered received one or two rounds of acceleration when more than 80% WUS already received the TT twice or more as WUS can complete her TT status through routine activities [2]. Implementation of the TT WUS first round in Indonesia, including Muna, held in July 2003 and the second round in May 2004 with the involvement across relevant sectors, among others, the Department of Education, BKKN, Department of Religion, the PKK and the NGOs under the coordination of the regional government, as leader of the region is responsible for the success of the activities in the region.

TT immunization at this high school student, performed in schools and voluntary. Prior to the TT immunization, announced prior to the students about the time and place of the event. With funding from UNICEF MNT, expected Muna can encompass the entire high school student who is at high risk TN area that is 4,327 people. From the results of the implementation of the first round of the TT immunization, was only able to capture

40.5% of all existing high school student [7], although in the implementation of the field has been carried out by health workers optimally. This study aims to determine the proportion of high school girls who are immunized TT, knowing the relationship predisposing factors (knowledge, attitudes, beliefs, residence status, father's education, mother's education and student), enabling factors (the number of sources of information and the intensity information obtained by student), factor needs (student against TT), and factors (role of peers and role of the teacher) with TT immunization status of high school student. This study wanted to see the most dominant variable is a disjunction with TT immunization status.

2. Materials and Methods

The study design was cross-sectional, the entire population is a high school student in the 18 districts in Muna are classified as high risk TN. The sample was selected with the criteria of student status and be selected as a sample. Respondents consisted of 730 people.

2.1 The sampling procedure.

Sampling was done by cluster sampling, where the school as his cluster units. Sample collection procedure as follows: a. Divide the study area into three clusters namely the City region, Muna south-west and north Buton b. The sample set of each cluster region as a proportion of the formula: c. Setting the number of clusters each school with reference to the large number of girls per unit cluster is the number of female students of the class (16-20 people). d. Encodes each existing cluster unit, and then clusters are randomly selected. e. The number of cluster unit that will represent each region based on the proportion of the number of samples of each cluster region. f. Establish a list of student samples in each cluster unit was selected based on a student number coded first. Subsequently the samples selected at random by using Epitable on Epi Info 6.4. Of the selected code number, it can be seen student numbers and student names will be sampled. Collecting data using questionnaires. To determine the level of difficulty as well as the question of representation of each variable, trials conducted prior to 30 high school students in the State other than the study population. The purpose of this test is to see the validity and reliability of the questions in the questionnaire. Test the validity of using the steps Likert with product moment coefficient (r) at the 5% significance level. The questionnaire is said to be valid if the value of r count> r table (0.304).

$$r = \frac{N(\sum XY) - (\sum X \sum Y)}{\sqrt{[N\sum X^2 - (\sum X)^2][N\sum Y^2 - (\sum Y)^2]}}$$

Keterangan:
N = jumlah responden
X = skor pernyataan nomor 'x'
Y = skor total

2.2 Data Analysis

Data analysis was carried out in stages: analysis of univariate, bivariate and proceed with the analysis of multivariat. To maintain confidentiality and avoid any complaint of respondent or other party to the results of

this study, then prior to the interview or questionnaire by the student, first granted approval sheet or informed consent.

3. Results

General characteristics of respondents based on factors predisposing, enabling, needs, and driving forces. Characteristics predisposing factors More than half of the 513 respondents (70.3%) had knowledge of the take good neighbor TT immunization, generally has a positive 444 (60.85%) and positive confidence 392 (53.7%), most of whom live at home alone 374 (51 , 2%), general education their parents completed high school, 207 mothers (28.4%) and 237 fathers (32.5%). Enabling factors; Sources of information obtained regarding TT immunization respondents generally quite 709 (97.1%), as well as most of the information intensity sufficient 408 (55.9%). In general, respondents expressed no need TT which 436 (59.7%). Factors driving; Most respondents expressed no influence of peers on the TT immunization status of 426 (58.4%) and generally girls declare no role of teachers towards their immunization status of the 420 (57.5%).

3.1 Characteristics of respondents

Table 1: Characteristics of respondents who participate on immunization research in Muna

Characteristic	n=730	(%)
Predisposing factors		
Knowledge		
- less	513	70,3
- Good	217	29,7
Attitude		
- Not positive	286	39,2
- Positive	444	60,8
Believe		
- Not positive	338	46,3
- Positive	392	53,7
Living status		
- Personal house	374	51,2
- Family house		

- Rent	299	41,0
	57	7,8
Mother education		
- Not graduate basic school	138	18,9
- Graduate Basic school	183	25,1
- Graduate Junior school	139	19,0
- Graduate Senior school	207	28,4
- Graduate University	63	8,6
Father education		
- Not graduate basic school	63	9,3
- Graduate Basic school	163	22,3
- Graduate Junior school	109	14,9
- Graduate Senior school	237	32,5
- Graduate University	153	21,0
Enabling factor		
Information source		
- less	21	2,9
- adequate	709	97,1
Information Intensity		
- less	322	44,1
- adequate	408	55,9
Need factor		
- no need	436	59,7
- need	294	40,3
Predisposing factor		
The role of friends		

- No role	304	41,6
- Role	426	58,4
Teacher role		
- No role	420	57,5
- Role	310	42,5

Table 2: Bivariate analysis of factors associated with TT immunization status Ms.Muna high school in

Variables	TT immunization status				P value	OR	95% CI
	Not accept		Accept				
	n	%	n	%			
Predisposing Factors							
Knowledge							
- Poor	253	49,3	260	50,7	0,052	1,37	0,22 - 6,22
- Enough	90	41,5	127	58,5			
Attitude							
- Not positive	178	62,2	108	37,8	0,000*	2,79	2,03 - 3,83
- Positive	165	37,2	279	62,8			
Believe							
- Not positive	244	72,3	94	27,8	0.000*	7,68	5,52 - 10,67
- Positive	99	25,3	293	74,7			
Residence							
- Not good	184	51,7	172	48,3	0,013*	1,45	1,08 - 1,94
- Good	159	42,5	215	57,5			

Mother education							
- Low	165	51,4	156	48,6	0,034*	1,37	1,01 - 1,87
- Enough	178	43,5	231	56,5			
Father education							
- Low	123	53,3	108	46,8	0,021*	1,44	1,04 - 2,01
- Enough	220	44,1	279	55,9			
Enabling Factor							
Information source							
- Less	16	76,2	5	23,8	0,011	3,74	1,35 - 10,31
- Enough	327	46,1	387	53,9			
Information intensity							
- Less	132	41,0	190	59,0	0,004	0,65	0,48 - 0,87
- Enough	211	47,0	197	53,0			
Need							
- Not need	242	55,5	194	44,5	0,000	2,38	1,73 - 3,29
- Need	101	34,4	193	65,6			
Predisposing factor							
Peer role							
- No role	173	56,9	131	43,1	0,000	1,99	1,45 - 2,72
- Role exist	170	39,9	256	60,1			
Teacher Role							
- No role	217	51,7	203	48,3	0,003	1,56	1,14 - 2,13
- Role exist	126	40,6	184	59,4			

Table 3: Multivariate analysis of the final model of the most dominant factors associated with TT immunization status Ms.Muna high school in 2004

No	Variables	OR	P Value	95% CI
1	Knowledge	1,18	0,393*	0,80 – 1,75
2	Attitude	1,31	0,161*	0,89 – 1,90
3	Believe	5,83	0,000	4,08 – 8,33
4	Status of residence	1,19	0,326*	0,84 – 1,68
5	Mother education	0,95	0,796*	0,62 – 1,44
6	Father education	1,32	0,217*	0,84 – 2,05
7	Information source	2,69	0,090*	0,85 – 8,46
8	Information intensity	0,93	0,011	0,88 – 0,98
9	Needs	1,49	0,033	1,03 – 2,14
10	The role of peers	1,61	0,013	1,11 – 2,33
11	The role of teachers	0,91	0,642*	0,63 – 1,33

5. Discussion

Respondents in this study amounted to 730 high school female students from SMU 1 Raha, SMUN2 Raha, SMK1 Raha, MAN New Town, SMU1 Kontunaga, SMU1 Kabawo, MAN Kabangka, SMUN1 Wakuru and SMUN1 Kulisusu. The results showed respondents generally have a good knowledge about the TT ie 70.3%, but the statistical test showed no correlation between knowledge with TT immunization status. It can be concluded that the low level of knowledge about the TT does not affect the intention or desire to accept or perform TT. These results differ from those obtained by [8] and [9], which both showed a significant relationship. Differences in these results may be due to different sample units, Rusdiansjah bride and Purwanti women of childbearing age, including pregnant women and mothers are often heard even mostly been doing TT immunization, whereas in this study using a sample unit for their girls high school where TT This is a new thing. It can also occur due to sufficient knowledge about immunization, is not always followed by action to perform immunizations. This is very dependent perceived benefits and barriers found in the decision making [10].

Attitudes of respondents to the TT are measured through the opinions or views of respondents on TT and their participation in the immunization activities. The results showed that most of the respondents have a positive attitude towards TT ie 60.8%, but with a multivariate analysis, the attitude showed no significant relationship ($p > 0.05$). This is in contrast with the theory described by [11], where a positive attitude a person can be followed by positive behavior. Value is very small with OR of 1.31 means that the tendency of respondents who have a positive attitude have a chance to 1.31 times for not doing TT compared with that having a positive attitude. This result is similar to that obtained [12], where the attitude does not show a significant relationship with the TT immunization status of WUS, but differ obtained [8] and [13], which showed a significant relationship between the attitudes of respondents with TT immunization practices. The differences in the results

obtained by other researchers because of the possibility of sample units are different. In Rudiansyah research using the bride and the baby's mother Fatimah use samples, so the diversity of attitudes towards TT may occur. In theory, these differences may result from an attitude of not automatically manifest in an action (overt behavior). To realize the attitude becomes a real action required supporting factor or a condition that allows [10]. Furthermore, according to [14], followed by a positive attitude positive practices such as TT immunization, must be supported by three components in a person, the cognitive component (believed by many owners attitude), the affective component in the form of feeling good and conative components in the form of a tendency particular behave in accordance with the attitude held by the subject.

More than half of respondents have a positive belief on the TT with the proportion of 53.7% and the remaining 46.3% had no positive belief. Statistical analysis showed no significant relationship between trust with TT immunization status ($p < 0.05$). Of all respondents who have a positive attitude (392 people), 62.8% did TT. Instead of all respondents who have a positive attitude (338 people), 72.3% did TT. This shows that trust in the community to TT greatly affect the decision of the respondent to perform TT. The OR value of 5.83 was obtained, meaning that there is a tendency that the trust is not positive respondents to the TT can lead to 5.83 times for not doing TT compared with those with a positive belief. The results are consistent with the results obtained by [15], which showed that there was a significant relationship between confidences in the use of health services, including immunization TT. Martha found that respondents who have positive beliefs tend to utilize health services. According to [16], trust individuals are more volatile than the trust because the trust groups of individuals are more subjective and relative, while the trust group has a stronger intensity because it is supported by other individuals a substantial amount, especially if the belief is supported by public figures. The Freeman concept illustrates that the presence of negative or positive belief against tetanus toxoid immunization in the community, both individual and group level will affect the acceptance of the TT immunization. The diversity of beliefs that exist in the community, causing the variation of the level of acceptance of the program.

Shelter or facility According to [17] is one of the very resources influence the behavior of a person or the public. Same statement also expressed by [10] that the status of residence can provide different characteristics of the person's behavior. The results showed that the residential status of the respondents in general good category (living with parents) which amounted to 51.2% remaining unfavorable category that stay with family 41% and boarding houses (7.8%). Although more than half of the respondents have a place to stay with good category (51.2%), but with a multivariate analysis, the residence showed no significant association with high school student TT immunization status ($p > 0.05$). Results were different from the theory put forward by [11] that students who live with their parents tend to be more restrained behavior than those living alone or staying with family. The condition can occur due to lack of parental control on child behavior. Besides, maybe the messages obtained respondents from parents or family dominated by a negative message messages that are forbidden to perform TT. The state may also be compounded by the low level of student knowledge (70.3%), so it cannot filter messages correctly. Similarly, the role of the environment, trust and peer very large. Therefore, although the majority of respondents have a place to stay with good category (living with parents), is not always followed by TT immunization practices.

Education is a process involving the development of human behavior with the whole experience of life.

Similarly [10] defines education as all efforts of adults in interaction with children for physical and spiritual development leads to maturity. Mother's education is expected to deliver a positive message and can guide their children to maturity; especially young daughter always asks the problem of femininity to his mother, including TT immunization issues. The results of this study found that maternal education level of respondents is quite varied, but the biggest is graduating high school education was 28.4%. Still met the mothers of the respondents are not in school or not graduate with a fairly large percentage, reaching 18.9%. Based on the low education category and simply by referring to the provisions of the nine-year compulsory education (at least junior high school graduation), showed that maternal education of respondents are mostly located in enough categories namely 56.0%. By multivariate analysis, the mother's education showed no significant relationship with the TT immunization status of respondents ($p > 0.05$). The results of this study are similar to those obtained Sugiri, but different results obtained by [8] which show that there is a role of maternal education on child TT immunization practices. The difference in the results obtained can be due to differences in sample units are used. Education concept presented above Purwanto Tadrif and not in line with the results obtained in this study. This may be due to a lack of communication between the mother and her son, so that advice, guidance should be obtained from the mother is not available. Though young women who are in transition, to behave badly in need of guidance and advice of her mother, especially those dealing with femininity among others TT. Therefore, lack of control and guidance of parents, including the mother, causing uncontrolled behavior of the respondent and the possibility cannot be positive behavior including acceptance of TT.

Father's education level of respondents is quite varied, but the biggest is the 32.47% graduated from high school. Still met the father of respondents who are not in school or not graduate at 9.32%. Based on the low education category and simply by referring to the provisions of the nine-year compulsory education (at least junior high school graduation), indicating that the respondent father's education are mostly located in enough categories namely 68.4%. Although more than half of the respondents father educated (68.4%), but with a multivariate analysis, the father's education showed no significant relationship with the TT immunization status of respondents ($p > 0.05$). The results of this study are similar to those obtained [8], but different from those obtained by [18] and [19] which show that there is the role of father's education on child behavior including TT immunization practices. The difference in results may be due to the sample units are different. Education concept presented above Tadrif not in line with the results obtained in this study. This may be due to a lack of communication between father and son, so that advice, guidance should be obtained from the father who became a role model and respected in the family, not obtained. Therefore, lack of control and guidance of parents, including the father, causing uncontrolled behavior and possible respondent may behave positively not include admission to the TT.

Health information can be obtained through three sources, namely interpersonal media (teachers, health workers, religious leaders, community leaders), print media (newspapers, magazines, leaflets, posters, flip charts, etc.) or electronic media (radio, TV, video , slides or film strips). Each source of information each has its own strengths, but the combination of all three sources of such information gives a great influence to change a person's behavior or society [20]. The results of this study indicate that the majority of respondents (97.12%) to obtain the amount of resources regarding TT immunization with enough category. However, although the majority of respondents to obtain the amount of resources with enough categories, the multivariate analysis

showed no significant relationship the amount of the resources obtained with TT immunization status of respondents (p> 0.05). The results of this study are similar to those obtained by [21] who obtained the result that there is no significant relationship resources amount obtained by immunization status of the respondent. The different results obtained by [22], which indicates that there is a significant relationship many resources obtained by immunization practices of respondents. Differences in the results obtained can be caused due to possible sources of information obtained has the quality and combination of different highly instrumental in influencing behavioral change a person or society [20].

Besides the amount of resources obtained that can affect the behavior of a person or society as described previously, exposure intensity or frequency information obtained was also very instrumental. In this study showed that (55.9%) obtain sufficient intensity information by category. What is interesting in this study is of all respondents who obtain sufficient intensity information with the category (408 people), more than half (51.7%) did TT. This suggests that the high intensity of exposure information obtained is not always followed by changes in behavior, in this case is the practice of TT. The condition can occur because of information obtained respondents who are positive (advocate) and those that are negative in nature. When the intensity information obtained by the respondents was dominated by negative messages against TT, then the likelihood that respondents will not do the TT. Statistical analysis showed that there was a significant correlation between the intensity of the information obtained with TT immunization status of respondents (p <0.05). OR values obtained at 0.65, meaning that the intensity of information showing protective properties. There is a tendency that the respondents were informed with less intensity category had 0.65 times the chance to do the TT compared with respondents who obtain resources with sufficient intensity. The study was similar to that obtained [22] states that there is a significant relationship with the mass media information intensity of immunization respondents. The fact is consistent with the concept of the behavior of Becker quoted [10] which is one of the factors that influence a person's decision to behave is information obtained. The influence of media exposure information according to Becker's highly influential in the development of insight, knowledge, determination of a person's attitude and behavior change. When the information obtained by the dominant negative message, the respondents tended to perform protective measures against such problems.

TT immunization appears to have not been perceived as a necessity by most respondents. From the results of this study showed that respondents who claimed not require TT by 59.73% and 40.27% said only need, but of all respondents who expressed need TT (294 people), 66% do TT. This suggests that the need for immunization accompanied with TT immunization practices. According to Gibson in [12], the need for an activator or plant behavior. That is, if the need arises due to the shortage, the individual immediately motivated to meet these needs Based on the analysis of bivariate tests, it appears that there is a significant relationship between factors needs TT immunization status with p <0.05. OR values obtained which is 2.4, meaning that there is a tendency that the respondents who expressed no need TT had 2.4 times the odds of not doing TT compared with respondents who stated need TT. The results of this study are similar to research by Kuswara who found a significant relationship between the needs of the TT immunization status of respondents. Different terms obtained [12] who found no significant relationship between the two variables. In theory this can happen because of the level of demand for health care is felt every community is different. Some are made of immunization as a major requirement, there is also made as a secondary requirement after another major unmet

needs.

The role of peers is expressed in the form of advice or support from a school friend of respondents in doing TT. From this study showed that the influence of peers has a large enough proportion of 58.4%. Of all respondents stating that there is a role of peers (426 people), 60.1% did TT. This shows that the influence of peers led to changes in the behavior of respondents to immunize very large. The results of the statistical analysis bivariate test shows that there is a significant relationship between the role of peers with TT immunization status ($p < 0.05$). Values obtained OR 1.99 means that there is a tendency that the respondents who did not have the support peers had 1.99 times the odds of not doing TT compared with respondents who receive support from their peers. The results of this study are similar to those obtained by [19] who found a significant relationship to the role of peer sexual behavior of high school students. In theory, according to [23] peer group have a very important role for the development of the life of a teenager. In the same age group there is a process of social learning in which individuals adopt habits, attitudes, ideas, beliefs, values that shape patterns of behavior in society. Positive support towards peers will affect the attitude of teenagers to participate positive behave also includes admission to the TT.

The role of teachers is expressed in the form of support / advice of teachers in schools in the implementation of TT immunization high school student. From this study showed that the role of the teacher has the proportion of 42.5%. This situation illustrates that the teachers seemed less contribute to the implementation of TT immunization at school. Statistical analysis also showed that there was no significant relationship between the role of teachers with high school student TT immunization status ($p > 0.05$). These results differ from those obtained [12] who found a significant relationship advice obtained from non-medical personnel with TT immunization status of WUS in Anyer Serang District Health Center. The difference in results can be partly due to the different sample units. Purwanto study used a sample of all women of childbearing age, including infants and toddlers, while mothers in this study only high school student. Besides, the study obtained Purwanto suggestion respondents sourced from all non-health officials, including teachers, whereas in this study only from teachers at school. According to [10] information / advice is one of the factors that can change a person's behavior or public health. Information / advice can be derived from the health officer or non-health such as teachers, community leaders or religious leaders. This suggests that teachers are always deliver messages to students, including health messages, can give effect to the students in conducting TT. The situation is apparent in this study, which support teachers less, causing low acceptance TT by girls in school

5. Conclusion

The results showed the proportion of high school girls who have not gained as much as 47% TT, TT one-time gain of 48.1% and the TT twice 4.9%. Variables significantly associated with a high school student TT immunization status ($p < 0.05$) was the belief (OR = 5.83), the intensity information (OR = 0.93), needs (OR = 1.49), peers (OR = 1.61). While the knowledge, attitudes, residence, mother's education, father's education, resources and the role of the teacher, did not show a significant correlation ($p > 0.05$). The most dominant factor affecting the TT immunization status of high school student is trust. To improve the coverage of TT immunization high school student should take into account the local belief, the information developed, the needs

and the role of peer students. Increase cooperation across sectors including teachers and community leaders in disseminating correct information about the usefulness of TT.

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